$$Vs = \frac{V1 + V2}{2} - \sqrt{\frac{Io}{2\beta}} - Vth \qquad (25)$$

Please add the following immediately after formula (25) on page 21:

This is equivalent to the notation: $V_s=(V_1+V_2)/2 - \sqrt{[I_0/(2\beta)]} - V_{TH}$, and shows that the common source voltage Vs includes a constant offset voltage:

$$-\sqrt{[I_0/(2\beta)]}-V_{TH.}$$